# NECESSITY OF SCHOOL CONSTRUCTION

#### INFORMATION AND INSTRUCTIONS

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#### INTRODUCTION

Under current state law (16-60-4.9iv), the Board of Regents for Elementary and Secondary Education has the responsibility for determining the need for all school housing projects supported by bond issue funds. This review of school housing projects serves two purposes: (1) qualification of the project for reimbursement under the state aid for housing program; and (2) certifying to the General Assembly that the project is needed should the district require enabling legislation for a bond. The review process, furthermore, guarantees that each year all requests are considered from a statewide perspective. That is to say, requests considered on the district level only, or individually one at a time, does not allow for a statewide assessment of fiscal impact or for potential use of facilities across district lines.

The necessity of school construction process is now initiated in late summer of each year when each local school district must notify the RI Department of Education (RIDE) of its intent to apply. Completed applications must be returned to RIDE by the end of October. An internal review committee reviews the applications prior to review by the Commissioner of Education. The Commissioner in turn makes his recommendations to the Board of Regents who have the final authority to approve or disapprove each application. Regents' consideration will take place in March or April of each year so that the necessary action may be taken prior to General Assembly consideration. Adherence to this timeline is crucial.

Plans for a maintenance, repair, renovation, or new construction project should have progressed to the point where complete information can be provided in the application. For example, projects involving new facilities should be supported by fully developed and finalized educational specifications as well as current data supporting need for the new construction, such as enrollment projections. Renovation, repair, or maintenance projects should be supported by appropriate technical documentation, such as engineering or architectural reports. Finally, all projects must have school committee approval prior to submission as well as firm support from the local Town or City Council(s). Projects in early planning stages that cannot be fully evaluated in the timeframe outlined above will not be reviewed until the next necessity of school construction cycle.

This booklet contains guidelines for preparing the necessity of construction application. The following information is divided into four sections and explains the required information for each part. Please follow the format outlined in these guidelines. Note that the Superintendent of Schools must sign each application as testimony to the accuracy of the data provided in the documentation.

#### **GENERAL INFORMATION**

- The guidelines for necessity of construction were updated in 2005. As noted in the Introduction, there are no specific forms to fill out. Please prepare the application using the sections outlined in the guidelines, including:
  - Section 1 Project Summary Information
  - Section 2 Planning Activities
  - Section 3 Project Details
  - Section 4 Project Justification
- Additional information can be attached to the application as deemed necessary. This information may include design plans, architect's master plan, or letters of support from the School Committee or Town/City Council.
- The application itself should be condensed into a summary format as much as possible. Although the Finance Office will review all the back-up documentation, including architect's master plan, other members of the review team do a high level analysis.
- Although the necessity of construction process applies primarily to major renovation projects, new additions, or new facilities, districts should keep in mind that <u>Capital Improvement Plans</u> must also be approved through this process. We suggest that districts file 5 year capital improvement plans so that an approval is only necessary once every 5 years. Please refer to "Section 3 Project Details" for further information related to capital improvement plans. If a district is also submitting a construction project, two separate packages should be submitted.
- <u>SUBMISSION INFORMATION</u> please submit <u>an original and 5 copies</u> of the application package to: Kristen Cole

Senior Finance Officer RI Department of Education 255 Westminster Street, 6<sup>th</sup> Floor Providence, RI 02903

Phone - (401) 222-4681 Fax - (401) 222-2823

The application package is due on the last working day in October.

Please note – it is not necessary to send 5 copies of the architect's master plan, if applicable. Copies of the executive summary will be sufficient.

#### SECTION 1 – PROJECT SUMMARY INFORMATION

\*\* Please see next page for a sample form for Section 1. \*\*

The intent of this section is to provide contact information and a summary of the project. Each application, regardless of whether the project involves major construction or capital improvements, must contain Section 1. Note that the Superintendent's signature is required at the bottom of the page.

#### Required Information:

- 1. Name of Local School District/Charter School
- 2. Date that application is submitted
- 3. Contact Person
- 4. Contact Telephone Number
- 5. Contact Email Address
- 6. Brief description of the project, such as "new middle school housing grades 6-8 with a capacity of 500" or "5-year district-wide capital improvement plan." Please use "Section 3 Project Details" for specific information related to the project.
- 7. Total estimated cost of the project (by fiscal year). Do not include bond related costs, such as issuance costs or interest. NOTE: final project costs may not exceed the amount of this application if approved by the Regents. Please consider inflation factors if the project is not expected to be completed in the near future.
- 8. Superintendent's certification the Superintendent's (or Director of School's) signature is required at the bottom of the page as testimony to the accuracy of the information contained in the application.

#### \*\* SAMPLE FORM/COVER SHEET \*\*

## RHODE ISLAND DEPARTMENT OF EDUCATION NECESSITY OF SCHOOL CONSTRUCTION/IMPROVEMENT

#### **SECTION 1 – SUMMARY INFORMATION**

1. Local School District:			_
2. Date Submitted:			_
3. Contact Person:			_
4. Contact Phone Number:			_
5. Contact Email Address:			_
6. Brief Description of the Project:			
7. Total Estimated Cost of the Project (by find Sample:  Addition to Elementary School	iscal year)	5,000,000	
,	FY 2009 Total	10,000,000 15,000,000	
OR			
Five Year Capital Improvement Plan	FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 Total	500,000 500,000 750,000 1,000,000 500,000 3,250,000	
I testify to the accuracy of the information	provided i	n this application.	
Superintendent/Director of Schools		Date	

#### **SECTION 2 – PLANNING ACTIVITIES**

\*\* Please include the required information using the numbers noted below, i.e. 1-5. If a section is not applicable, include the noted number and put N/A (i.e. 5. N/A). \*\*

The intent of this section is to summarize project planning activities. This section will discuss which consultants assisted with the project planning and whether there is municipal support for the project. In addition, this section will describe the alternatives explored, historical implications of existing facilities, and the energy efficient/gross smart concepts considered. Failure to perform adequate research while planning may result in development of incomplete educational specifications, pursuit of a school construction project which does not address all of your needs, costly change orders during the course of construction, or insufficient local support for the project and defeat at referendum.

#### Required Information:

- 1. Describe project planning activities, including:
  - List of committees formed and participating members
  - Timeline for activities
  - Names of architect/contractor assisting with the planning
  - Involvement of constituents in the district
  - Municipal participation
  - Long-term planning goals
- 2. Describe the project options the planning team developed. Note: this section should discuss all the alternatives considered. "Section 3 Project Details" will ask for specific information related to the project that was ultimately selected.
- 3. Describe whether the district considered smart growth concepts with relation to educational facilities and the impact of suburban sprawl in developing and planning for new construction. If possible, projects should encourage revitalization of existing facilities and consideration should be given to locating facilities in areas that are already served by existing or planned water, sewer, and other public infrastructure. The district should encourage the local school expansion planning committee to review the school policy reform recommendations that have been offered by The National Trust for Historic Preservation in the report *Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can't Walk to School.* Recommendations made by The National Trust for Historic Preservation have been included in <u>Appendix 1</u>.

#### **Definitions:**

"Smart growth" is intelligent, well-planned development that channels growth into existing areas, provides public transportation options, and preserves farmland and open space.

- "Suburban sprawl" is irresponsible, poorly planned development that destroys green space, increases traffic, crowds schools, and drives up taxes.
- 4. Describe energy saving strategies that were incorporated into the project planning to support energy efficient schools. The Northeast Energy Efficient Partnerships, Inc. (NEEP) recently released a report with recommendations as to how to promote high performance school principles and strategies in school districts in the Northeast. High performance school buildings are designed with the intent to provide healthy and productive, cost-effective, and sustainable environments for educating students. Some of the recommendations include:
  - Develop a high performance school standard that can be used regionally as a best practices manual;
  - Reach out to all target audiences in order to increase their knowledge and awareness of high performance schools;
  - Include in school budgets funds for energy modeling and third party consultant to assist with the planning; and
  - Collaborate with trade associations and professional organizations to learn and exchange information related to high performance schools.

For further information, refer to NEEP website at www.neep.org.

5. Describe whether the planning committee considered historical implications of existing facilities. If the project involves renovating or demolishing a building that is 50 years old or older, please advise the Rhode Island Historical Preservation & Heritage Commission.

Contact Information: Mr. Rick Greenwood

RI Historical Preservation & Heritage Commission

Old State House 150 Benefit Street

Providence, RI 02903-4134

(401) 222-4134

www.rihphc.state.ri.us

#### **SECTION 3 – PROJECT DETAILS**

\*\* Please include the required information using the parts and numbers noted below, i.e. Part 1 - #s 1-3.

If a section is not applicable, include the noted number and put N/A (i.e. Part 3 #4. N/A). \*\*

The intent of this section is to detail the project ultimately selected by the project planning committee. This section will discuss the type of project, the planned goals of the project, capacity, gross square footage of new construction, and location and site availability, if applicable. This section will also detail the educational goals and financial implications of the project. Furthermore, this section will note whether there is local and school committee support for the plans. Note: this section is used to describer the project. Use "Section 4 – Project Justification" to defend the need for the project.

Required Information:

#### PART 1 – PROJECT DESCRIPTION

- 1. Provide project title, such as "New Middle School," "Addition to XYZ School," or "Five Year Capital Improvement Plan."
- 2. Indicate the Type of Project, selecting from the following choices:
  - New building (new construction)
  - Renovation of existing building
  - Addition to existing building
  - Repairs/deferred maintenance (i.e. capital improvements)
- 3. Provide a description of the project, including if applicable:
  - Description of what the district intends to do. Include draft design plans, if available.
  - Expected start date and completion date for project. Note: Housing Aid reimbursement will not begin until the project is completed.
  - **Current** district data, including:
    - o Total number of schools
    - o Capacity of each school
    - o Grade organization
    - o Enrollment by grade
    - o Enrollment by school
  - <u>Planned</u> district data (once proposed project is complete), including: (Refer to <u>Appendix 2</u> New Construction Planning Guidelines.)
    - o Total number of schools
    - o Capacity of each school
    - o Grade organization
    - o Enrollment by grade
    - o Enrollment by school

- Gross square footage of new construction
- Availability of a site for new construction
- Facilities that may be surplused as part of this project
- 4. <u>Capital Improvement Plans only</u> Districts typically submit 5 year capital improvement plans so that an approval in only necessary once every five years. These plans should include projects that are truly an improvement to the existing facility and not related to maintaining the facility. For example, replacing the HVAC system is an approvable capital item while cleaning the air ducts is not. Furthermore, equipment purchases are not reimbursable as capital improvements. For example, computer purchases are not approvable capital items; however, the wiring and infrastructure changes necessary to upgrade the technology would be acceptable.

The Department understands that planning 5 years in advance is sometimes difficult to do. However, once a district has an approval on the books, changes to the capital plan can often be handled administratively. For instance, if a district experiences cost overruns or an emergency project that is not similar to anything in the plan, a letter can be written to the State Aid Specialist explaining the situation and reason for why the item was not included in the original plan. If the item and rationale appears acceptable, the approval will be updated and the district will not need to go before the Board again. Large-scale changes may need to be brought to the Board for approval. Changes to the capital improvement plan will be reviewed on a case-by-case basis.

Districts can attach a spreadsheet detailing the planned projects with amounts by fiscal year. Please ensure there is an action verb preceding the repair so that the Department knows what the district is doing. For instance, put "Replace Roof" instead of just "Roof" or "Replace HVAC system" instead of "Air conditioning unit." Please round up to the nearest whole dollar. See <u>Appendix 4</u> for a sample capital improvement plan.

#### PART 2 – EDUCATIONAL SPECIFICATIONS

Include educational specifications for the new facility or addition. Educational specifications are defined as numerical and verbal description of a specific education program for a specified number of students over a specified period of time, together with the spaces needed to support the program. The educational specifications document should be complete to the degree that the core facility is adequate to address instructional needs and an architect may use it as the basic document from which to create the design of the facility. For instance, the cafeteria should be designed so that there are at least 15 square feet per pupil and seating for no less than 1/3 the planned enrollment; thus, lunch can be served in no more than 3 seatings. Another example is the high school auditorium that should provide seating for no more than the planned enrollment or more than 1000 people, if planned enrollment exceeds 1000. Please refer to the guidelines for internal space provided in <u>Appendix 2-Part 4</u> for further information.

The education specifications section should also address external space. The district should indicate whether there is enough space for parking, bus turn around, recess areas, athletic fields, and any other external item necessary to adequately administer the school.

Include a description as to how grade organization in the district will be affected by the proposed project. For example, a new middle school may shift Grade 6 from the Elementary and Grades 7-8 from the High School. Note how the district has planned for changes in grade organization, i.e. will there be surplus staff or can services be consolidated to avoid duplication?

Proposals for schools serving more than 400-500 students must also address the smaller instructional and support services groupings that are necessary to provide personalized learning environments. This includes small learning communities of 400-500 students in larger schools; providing for adult-student relationships, such as advisories, so that students are well known by at least one adult; and planning for the individual student's social, emotional, academic, and career needs.

#### **PART 3 – FINANCIAL INFORMATION**

1. Include a detailed breakdown of the costs associated with this project. This cost analysis should include not only the construction costs but also inflation factors and other soft costs, such as architect and contractor fees. Note: please ensure that the costs are broken down between new space (i.e. addition) and space improvements (i.e. renovation). Therefore, if a district is building an addition onto the high school as well as conducting major renovations on this particular facility, the soft costs would have to be pro rated between the two aspects of the project. By separating the costs, RIDE is able to compare the cost of the new construction versus the renovations. Please round up to the nearest whole dollar.

NOTE: RIDE calculates the cost per square foot for new construction by dividing the total cost of the project by the total square feet. We include soft costs in our calculation. If the cost per square foot is significantly high, please provide justification supporting the figures. Cost per square foot guidelines have been included in <u>Appendix 3</u>.

- 2. Indicate how this project will be financed. If the project is to be supported by financing other than a general obligation bond, please indicate the alternative financial mechanism selected and a brief explanation as to why it is sound and cost efficient both in terms of the project itself and overall municipal fiscal policy and practice. Please keep the following items in mind when considering financing mechanisms:
  - The financial mechanism must meet the test of prudent municipal financing policy, and shall have a term no longer than the useful life of the project.

- Interest costs are reimbursable only on general obligation bonds issued through the Rhode Island Health, Education, and Building Corporation (RIHBEC).
- The normal public review required for financial mechanisms other than bonds, e.g. formal appropriation of funds by a city or town council, will be required prior to reimbursement.
- 3. Consider how financing this project will impact the district, including:
  - Note the district's current level of indebtedness.
  - Estimate increases in the school operating budget for items such as additional staff, maintenance costs, utilities, etc.
  - Estimate potential increases in the local tax rate as a result of this project.
- 4. <u>Charter Schools Only</u>: Because charter schools do not have municipal support as is the case with local school districts, please provide a description and defense of the funding mechanism. Indicate where the additional funds will come from to make the debt service payments. Note: if the charter school fundraises to pay for part of the capital campaign, this portion of the project cost will not be reimbursable under the Housing Aid program.

#### PART 4 – MUNCIPAL/SCHOOL COMMITTEE SUPPORT

- 1. Indicate whether the School Committee supports this project (attach documentation).
- 2. Indicate whether the City/Town Council supports this project (attach documentation).

#### **SECTION 4 – PROJECT JUSTIFICATION**

\*\* Please include the required information using the numbers noted below, i.e. 1-5. If a section is not applicable, include the noted number and put N/A (i.e. 5. N/A). \*\*

The intent of this section is to clearly justify why the proposed project is necessary. This section should indicate why new construction is necessary as opposed to renovating existing facilities. This section should also detail the current condition of existing facilities. Applicants should include data that supports the need for the project, including enrollment projections, community data, and project cost comparisons.

#### Required Information:

- 1. Indicate how the current condition of existing facilities has been addressed. Link this information to the need for new construction or a major renovation project. With new construction, the application should clearly indicate why existing facilities cannot be renovated to meet the needs of the district. With renovation projects, the application should clearly indicate that the condition of the affected facilities is poor. The application should note whether the renovations are necessary for building code compliance, health and safety concerns, security issues, etc.
- 2. Provide enrollment projections for the next five years by grade with a brief analysis (increases/decreases from year to year shown in actual numbers or percents) of how the data supports the need for the project. When possible, local enrollment projections should be supported by those from an outside source, such as the RIDE or NESDEC.
- 3. Provide community data, e.g. population, housing stats, birth rates, or immigration estimates, and an analysis of how the data supports the need for the project.
- 4. Provide a cost comparison between this project and other alternatives reviewed. If the project involves a new facility, the cost analysis must show clearly and fully that the proposed new construction is the best available alternative to meet the projected need based upon educational programs to be housed, total cost effectiveness, and the public interest. Include a consideration of indirect costs associated with the project, such as new sewers, roads, transportation, or utilities. If there are surplus buildings, include benefits or costs to the public, such as re-sale value or demolition costs. If the project is a renovation of an existing building, include documentation that the building is structurally sound or can reasonably be made so.
- 5. Provide any other information deemed necessary to support the need for this project. Applicants may include a list of building deficiencies that this project will remediate, such as capacity issues, large classroom sizes, ability to offer ancillary services, appropriate learning environment, etc.

#### **APPENDIX 1**

# Twelve Recommendations to Move Smart School Goals Forward Historic Neighborhood Schools in the Age of Sprawl: Why Johnny Can't Walk to School By The National Trust for Historic Preservation

- 1. Put historic neighborhood schools on a level playing field with new schools. Eliminate funding biases that favor new construction over school renovation and good stewardship.
- 2. Eliminate arbitrary acreage standards that undermine the ability of established communities to retain and upgrade (or replace on the same site, when necessary) historic and older schools that could continue to serve as centers of the community.
- 3. Avoid "mega-school sprawl" massive schools in remote locations that stimulate sprawl development and are accessible only by car or bus.
- 4. Develop procedures for accepting land donated by developers for new schools. Land in "sprawl locations" that are inappropriate for schools should be rejected.
- 5. Encourage school districts to cooperate with other institutions e.g. government agencies, nonprofits, churches, and private businesses to share playgrounds, ball fields, and parking as well as to provide transit services, when appropriate.
- 6. Establish guidelines, training programs, and funding mechanisms to ensure adequate school building maintenance. Create disincentives for school districts to defer needed maintenance and allow buildings to fall into disrepair.
- 7. Require feasibility studies comparing the costs of new schools with those of renovating existing schools before new schools are built and existing ones are abandoned. Hire only architects with experience in rehabilitation work to conduct such studies. These studies should also consider the impact of a school's closing on existing neighborhoods, long-term transportation costs, and municipal service burdens. Finally, these studies must be presented to the public for comment before projects move forward. If they are presented only to the superintendent and school facilities committee, their use is limited.
- 8. Reexamine exemptions given to local school districts from local planning, zoning, and growth management laws.
- 9. Work to ensure that a minimum of 50% of the students can walk or bike to school in cities, towns, and suburbs. Promote safe-routes-to-school legislation in the state.
- 10. When a historic school cannot be preserved and reused, school districts and/or local government should implement plans for the building's adaptive use or replacement so that it does not become a source of blight in the neighborhood.
- 11. Promote "smart codes" legislation to encourage the rehabilitation and modernization of historic schools as well as other still serviceable buildings.
- 12. Provide education and training in school renovation techniques and options for school facility planners, contractors, private consultants, architects, school board members, municipal officials, and others.

#### **APPENDIX 2**

#### **New Facility Planning Guidelines**

\*\* Derived from the Massachusetts School Building Assistance Bureau regulations \*\*

#### PART 1 – GUIDELINES FOR PLANNED ENROLLMENTS

In general, schools should be planned primarily in response to educational and curriculum needs, i.e. the spaces should be designed to support program needs. In addition, minimum and maximum classroom size should be dictated by common sense, good practice, and contractual considerations. Numbers of classrooms should be sufficient to use fully administrative staff and to provide an adequate pool of professionals to meet a wide range of curriculum needs. Accepted guidelines provide the following minimum enrollments:

- Elementary Schools two classes per grade or ten general classrooms or equivalent general areas
- Middle Schools (grades 6-8) 400 pupils
- High Schools (grades 9-12) 500 pupils

Elementary schools should not be planned to serve more than four classes per grade; middle schools should not exceed 1200 pupils in planned enrollment; and high schools should not be planned to exceed 2000 pupils in enrollment.

#### PART 2 – GUIDELINES FOR PLANNING NEW BUILDINGS

In order to assure maximum attention to the cost effectiveness of program and design decisions as well as to materials and systems selections, the planning of new buildings and major renovations should include:

- Provision for a minimum educational life of fifty years;
- Selection of building design, materials, and finishes so that vandalism is minimized;
- Provision in all facilities for equality of opportunity and access without discrimination on the basis of sex, race, color, religion, national origin, or handicap;
- Procedures by which the project should be planned and designed to achieve a
  desired standard of excellence at the most effective cost and by which a
  systematic approach shall be used to identify and remove unnecessary costs
  relating to such items as the selection and design of energy use, site, site
  preparation, utilities design and location, foundations, structural systems, roof
  systems, carpentry, masonry, roofing, windows, and glazing, acoustics,
  plumbing, heating and ventilating systems, electrical systems, exterior facing,
  and fixed equipment;
- Consideration of the effects of initial capital costs versus maintenance costs over the life of the building with the goal of reducing such maintenance costs;

- Consideration of life-cycle costs estimates of all feasible energy systems to identify the system with the lowest life-cycle cost estimate; and
- Assurance that all contracts and subcontracts are in conformity with all applicable provisions of federal, state, and local law and regulations, including those related to minority hiring.

#### PART 3 – GUIDELINES FOR SITE SELECTION

A school site should conform to the following requirements. The site should:

- be chosen on the basis that it will meet the educational need and minimize any possible adverse educational, environmental, social, or economic impact upon the community (e.g. need to supply new sewers, roads, or water connections; existence of soil conditions that will result in increased site developmental costs; or curtailment of the approved educational program);
- be so located as to serve efficiently and safely the school population it is intended to serve and be of sufficient size to accommodate the building and planned future additions as well as outdoor educational facilities, parking, bus turnarounds, delivery areas, required setbacks, and planned aesthetics;
- be reasonably free from olfactory, auditory, visual, and noxious pollution, or should be capable of being made so prior to commencement of construction;
- not be excessively costly to the community; and
- be located whenever possible in proximity to other facilities, such as libraries, museums, parks, natural resources, and/or other facilities which would enhance the proposed educational program.

#### PART 4 – GUIDELINES FOR SQUARE FOOTAGE REQUIREMENTS

The following table provides guidelines for minimum classroom space requirements and can be used in planning for new educational facilities:

**ELEMENTARY SCHOOLS** 

Type of Space (Excludes Storage)	Minimum-Maximum Square Footage
Classrooms	900 – 1000 square feet
Kindergarten (with self-contained lavatory)	1200 – 1300 square feet
Special Education	As needed
Art and Music	1000 – 1200 square feet
Practice Rooms	75 – 130 square feet
Ensemble Rooms	Up to 200 square feet
Media Center/Library-Reading room	1800 – 3000 square feet
Cafeteria	15 square feet per pupil computed to accommodate not more than 1/2 nor less than 1/3 the planned enrollment
Gymnasium: - Twelve-classroom school or larger – separate gymnasium (two stations) Smaller school, all-purpose room and	- 2000 – 3000 square feet per station - 1800 – 3000 square feet each
subsequent teaching stations.	11
Administration	Up to 800 square feet
Health Suite	300 – 750 square feet
Guidance Suite	As needed
Remedial and Seminar	Up to 500 square feet each

**HIGH SCHOOLS** 

Type of Space (Excludes Storage)	Minimum-Maximum Square Footage
Classrooms:	
- Small Group Seminar	- 300 – 500 square feet
- Regular Interchangeable (20-30 pupils)	- 750 – 850 square feet
- Large Group (80-125 pupils)	- 1500 – 2000 square feet
Art:	
- General Area (storage not included)	- 1200 – 1400 square feet
- Specialized Area (storage not included)	- 600 – 1000 square feet
Music:	
- Rehearsal (band, chorus, etc.)	- 1400 – 1600 square feet
- Theory and Choral	- 750 – 1200 square feet
- Practice Rooms	- 75 – 130 square feet
- Ensemble Rooms	- Up to 200 square feet
Industrial Arts – Workshops	Up to 100 square feet per pupil per shop

**HIGH SCHOOLS (continued)** 

HIGH SCHOOLS (continued)				
Business Education:				
- Classroom	- 750-850 square feet			
- Laboratory	- 750 – 1100 square feet			
Homemaking:				
- Food Area	- 1200 – 1400 square feet			
- Home Management	- 2400 – 2600 square feet			
- Clothing (avg. 1 planned per 20 students)	- 1200 – 1400 square feet			
Mechanical Drawing (25-30 pupils)	900 – 1000 square feet			
Science:				
- Lecture/Laboratory	- 1000 – 1200 square feet			
- Demonstration/General Science	- 900 – 1000 square feet			
Cafeteria	15 square feet per pupil computed to accommodate not more than 1/2 nor less than 1/3 the planned enrollment			
Physical Education:				
- Gymnasium (two stations)	- 6200 – 7500 square feet			
- Additional teaching stations	- 1200 – 3500 square feet			
Library (instructional materials center)	Up to 15% of enrollment times 25-40			
	square feet maximum			
Auditorium	Seating for not more than planned enrollment or more than 1000 persons, if planned enrollment exceeds 1000 (allow 7 square feet per person maximum)			
Administration	Up to 1500 square feet			
Guidance	800 – 1000 square feet			
Health	500 – 1000 square feet			

#### MIDDLE SCHOOLS

Educational program spaces in middle schools should be the same as noted above for the High Schools with the exception of the following adaptations:

Type of Space (Excludes Storage)	Minimum-Maximum Square Footage
Science	1000 – 1200 square feet
Physical Education (2 stations)	4500 – 7500 square feet
Additional Stations	Up to 3000 square feet each
Industrial Arts	1500 – 1800 square feet per station

#### **APPENDIX 3**

#### **Cost Per Square Foot Guidelines**

\*\* Derived from the Massachusetts School Building Assistance Bureau regulations \*\*

On May 25, 2004, the Massachusetts Board of Education approved a 7.3% inflation factor for school construction costs. The following table applies this inflation factor to the FY 2003 approved cost standards. Note: these figures do not include the cost of land or furnishings and equipment.

Type of School	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
	Cost Stds				
Elementary	\$196	\$211	\$226	\$243	\$261
Middle	\$209	\$224	\$241	\$258	\$277
High	\$224	\$241	\$258	\$277	\$297
Career & Tech	\$238	\$256	\$275	\$295	\$316

- Cost allowance for furnishings and equipment is \$16 per square foot.
- Due to differing real estate values, the cost of land acquisition will be reviewed on a case-by-case basis.

### **APPENDIX 4**Sample Capital Improvement Plan

#### **Five Year Capital Improvement Plan**

District: ABC

Description	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	Total
Replace HVAC system at XYZ Elementary School	250,000	250,000				500,000
Library de distribute Orbert Construction and a second			50,000			50,000
Upgrade wiring at High School for new technology			50,000			50,000
Repave Middle School parking lot				100,000		100,000
Replace roof at ABC Elementary School				250,000	250,000	500,000
Repair tile flooring district-wide	10,000	10,000	10,000	10,000	10,000	50,000
Deiest eleccuses district vide	25.000	25.000	25.000	25 200	25 200	405.000
Paint classrooms district-wide	25,000	25,000	25,000	25,000	25,000	125,000
Total Request	285,000	285,000	85,000	385,000	285,000	1,325,000

Some items that will not be reimbursed: lockers; window screens, curtains, or blinds; equipment (e.g. computer monitors, hardware, and software; air compressor; individual air conditioning units; floor washing machines; television/media equipment; vehicles; auditorium stage curtains; or maintenance related items (e.g. air duct cleaning; oil burner maintenance; or graffiti removal).

This list is not comprehensive but gives districts an idea of the types of items that do not qualify for Housing Aid. If you have any questions regarding the eligibility of an item, please contact the State Aid Specialist.